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## TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

ATTORNEY'S DOCKET NUMBER 297/171 PCT/US

e 37 CFR 1.5)

**CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/US04/08724 22 March 2004 (22.03.2004) 21 March 2003 (21.03.2003) TITLE OF INVENTION METHODS AND SYSTEMS FOR SINGLE- OR MULTI-PERIOD EDGE DEFINITION LITHOGRAPHY APPLICANT(S) FOR DO/EO/US NORTH CAROLINA STATE UNIVERSITY, et al. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  $\overline{X}$  This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31).  $\mathbf{X}$ A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4).  $\mathbf{X}$ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover Express Mail" mailing number EV64113a50105 Date of Deposit September 21 2005 A preliminary amendment. I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail to Addressee" service under 37 C.F.R. 1.10 on An Application Data Sheet under 37 CFR 1.76. the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. A substitute specification. Stacie H. Boswell Hacis H. Bosweel A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete. including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Page 1 of 3 Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## JC20 Rec'd PCT/PTO 21 SEP 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

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| U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.  |   | ATTORNEY'S DOCKET NUMBER |                        |               |  |
|--|---|--------------------------|------------------------|---------------|--|
| 10/550040 PCT/US04/08724   |   | /08724                   | 297/171 PCT/US         |               |  |
| 20. Other items or information: Form PTO-1449  |   |                          |                        |               |  |
| The following fees have been submitted   |   |                          | CALCULATIONS           | PTO USE ONLY  |  |
| 21. X Basic national fee (37 CFR 1.492(a)).  |   | \$300                    | · C                    | 1 TO OOL ONET |  |
|  |   |                          | 300.00                 |               |  |
| 22. X Examination fee (37 CFR 1.492(c))  |   |                          |                        |               |  |
| If the written opinion prepared by ISA/US or the int<br>by IPEA/US indicates all claims satisfy pro<br>All other situations  | \$ 200.00   |                          |                        |               |  |
| 23. X Search fee (37 CFR 1.492(b))  If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)  |   |                          | .\$ 100.00             |               |  |
| TOTAL OF 21, 22 and 23 =   |   |                          | 600.00                 |               |  |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |   |                          |                        |               |  |
| thereof (round   | Number of each additional 50 or fraction RATE thereof (round <b>up</b> to a whole number) |                          | 0.00                   |               |  |
| 0 - 100 =   -100 /50 =   |   | x \$250                  | \$ 0.00                |               |  |
| Surcharge of \$130.00 for furnishing any of the sea after the date of commencement of the national sta   | \$ 0.00   |                          |                        |               |  |
| CLAIMS NUMBER FILED  | NUMBER EXTRA  | RATE                     | \$                     |               |  |
| Total claims 50 - 20 =   | 30  | x \$ 50                  | \$ 1,500.00            |               |  |
| Independent claims 6 - 3 =   | 3   | x \$200                  | \$ 600.00              |               |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360  |   |                          | \$ 0.00                |               |  |
|  | \$ 2,700.00   |                          |                        |               |  |
| Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  |   |                          | 1,350.00               |               |  |
|  | \$ 1,350.00   |                          |                        |               |  |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  |   |                          | \$                     | 0.00          |  |
|  | \$  | 1,350.00                 |                        |               |  |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property +  |   |                          | \$                     | 0.00          |  |
| TOTAL FEES ENCLOSED =  |   |                          | \$                     | 1,350.00      |  |
|  |   |                          | Amount to be refunded: | \$            |  |
|  |   |                          | Amount to be charged   | \$            |  |

10/550040

PTO-1390 (Rev. 07-2005)

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|  |  | JC20 Recapcivation at Sep 2003  |  |  |  |
|--|--|---|--|--|--|
| а. 🗌   | A check in the amount of \$  | to cover the above fees is enclosed.  |  |  |  |
| b. X   | Please charge my Deposit Account No. A duplicate copy of this sheet is enclose   | $\underline{50\text{-}0426}$ in the amount of \$ $\underline{1,350.00}$ to cover the above fees. d. |  |  |  |
| c. X   | The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No50-0426 A duplicate copy of this sheet is enclosed.  |   |  |  |  |
| d. 🗌   | Fees are to be charged to a credit card. <b>WARNING</b> : Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038. |   |  |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. |  |   |  |  |  |
| Grego<br>Jenkir<br>Suite<br>3100<br>Durha  | ory A. Hunt ory A. Hunt ors, Wilson & Taylor, P.A. 1400 University Tower Tower Boulevard ord, NC 27707 OED STATES OF AMERICA   | SIGNATURE  Gregoty A. Hunt  NAME  41,085  REGISTRATION NUMBER                                       |  |  |  |